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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KISS, ERIC B

ART UNIT

PAPER NUMBER

2192

MAIL DATE

DELIVERY MODE

04/17/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/749,757	NIKOLOV, NIKOLAI G.	
	Examiner	Art Unit	
	ERIC B. KISS	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 August 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20080930</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The reply filed December 8, 2008, has been received and entered. Claims 1-39 are pending.

Response to Amendment

2. The objection to the specification has been withdrawn in view of applicant's amendment.

3. The rejection of claims 14-39 under 35 U.S.C. § 101 has been withdrawn in view of applicant's amendments.

4. The rejection of claims 4, 17, and 30 under 35 U.S.C. § 112, second paragraph, has been withdrawn in view of applicant's amendments.

Response to Arguments

5. Applicant's arguments filed March 11, 2008, have been fully considered but they are not persuasive.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Applicant merely alleges that providing options for modifying bytecode at different levels of precision is "very different from allowing piecemeal selection of individual methods as recited in Berry." However, the system of Berry, being able to select single methods or groups of several methods "provides" the same "options" as applicant's invention as claimed.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-12, 14-25, and 27-38 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,662,359 (Berry et al.).

Regarding claim 1, *Berry et al.* discloses a method for tracing program flow within an application comprising:

providing options for modifying bytecode of the application at a plurality of levels of precision, each of the levels of precision specifying a particular set of methods of the application to be traced (*see, e.g., Berry et al.* at col. 5, line 59, through col. 6, lines 45; col. 7, lines 5-11 (selective instrumentation of some or all methods));

receiving a request to modify the bytecode at one of the of levels of precision (*see, e.g., Berry et al.* at col. 5, line 59, through col. 6, lines 45);

responsively modifying the bytecode at the requested level of precision (*see, e.g., Berry et al.* at col. 6, line 51, through col. 7, line 17);

executing the application (*see, e.g., Berry et al.* at col. 7, lines 44-45); and

registering method invocations associated with the particular set of methods specified by the level of prevision (*see, e.g., Berry et al.* at col. 6, lines 55-65).

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Regarding claim 2, *Berry et al.* further discloses one of the levels of precision comprises all methods within the application (*see, e.g., Berry et al.* at col. 7, lines 5-11 (selective instrumentation of some or all methods)).

Regarding claim 3, *Berry et al.* further discloses one of the levels of precision comprises all methods within a package of the application (*see, e.g., Berry et al.* at col. 7, lines 5-11 (selective instrumentation of some or all methods)).

Regarding claim 4, *Berry et al.* further discloses the application being an object-oriented application and the package being an object-oriented package (*see, e.g., Berry et al.* at col. 4, lines 22-40 (the process operates on class files)).

Regarding claim 5, *Berry et al.* further discloses one of the levels of prevision comprises all methods within a particular class file of the application (*see, e.g., Berry et al.* at col. 7, lines 5-11 (selective instrumentation of some or all methods)).

Regarding claim 6, *Berry et al.* further discloses one of the levels of precision comprises individually identified methods of the application (*see, e.g., Berry et al.* at col. 7, lines 5-11 (selective instrumentation of some or all methods)).

Regarding claim 7, *Berry et al.* further discloses modifying the bytecode comprises:
inserting a start method invocation prior to each method of the set of methods and
inserting an end method invocation following each method of the set of methods (*see, e.g., Berry et al.* at col. 6, line 51, through col. 7, line 17).

Regarding claim 8, *Berry et al.* further discloses storing method-related information associated with the method invocations of each of the particular set of methods (*see, e.g., Berry et al.* at col. 6, line 51, through col. 7, line 17).

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Regarding claim 9, *Berry et al.* further discloses the method-related information comprises an amount of time it takes for each method within the set of methods to complete (*see, e.g., Berry et al.* at col. 6, line 51, through col. 7, line 17).

Regarding claim 10, *Berry et al.* further discloses the method-related information comprises a number times that each method of the set of methods is executed (*see, e.g., Berry et al.* at col. 6, line 51, through col. 7, line 17).

Regarding claim 11, *Berry et al.* further discloses the method-related information comprises input and/or output parameters associated with each method of the set of methods (*see, e.g., Berry et al.* at col. 6, lines 1-16).

Regarding claim 12, *Berry et al.* further discloses constructing a hierarchical representation of the particular set of methods, the hierarchical representation including an indication of an amount of time it takes for each of the particular set of methods to complete (*see, e.g., Berry et al.* at col. 6, lines 1-16).

Regarding claims 14-25, these are system/software versions of the claimed methods discussed above (claims 1-12). *Berry et al.* further discloses the use of such systems/software to implement the prescribed methods (*see, e.g., Berry et al.* at col. 14, lines 30-44), and all other limitations have been addressed as set forth above.

Regarding claims 27-38, these are article versions of the claimed methods discussed above (claims 1-12). *Berry et al.* further discloses the use of such articles to implement the prescribed methods (*see, e.g., Berry et al.* at col. 14, lines 30-44), and all other limitations have been addressed as set forth above.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 13, 26, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,662,359 (Berry et al.) and U.S. Patent No. 6,836,878 (Cuomo et al.).

Regarding claims 13, 26, and 39, in addition to the disclosure applied above to claims 1, 14, and 27, although *Berry et al.* fails to expressly disclose generating a graphical tree reflecting the hierarchical representation within a graphical user interface, wherein the graphical tree includes a separate entry for each method within the set of methods, *Cuomo et al.* teaches that such graphical trees are known in the context of object-oriented development systems as a known means of providing useful information about object-oriented classes and methods (*see, e.g., Cuomo et al.* at col. 2, line 57, through col. 3, line 17; Fig. 3A). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate such a graphical tree into the development environment of *Berry et al.* to gain the benefit of providing to a developer a greater understanding of the class library that the developer is working with.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric B. Kiss whose telephone number is (571) 272-3699. The examiner can normally be reached on Tue. - Fri., 7:00 am - 4:30 pm. The examiner can also be reached on alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam, can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eric B. Kiss/

Eric B. Kiss

Primary Examiner, Art Unit 2192